

**Mattingly Products Company, Inc.
Somerset County
North Anson, Maine
A-123-71-L-A (SM)**

**Departmental
Findings of Fact and Order
Air Emission License
Amendment #1**

After review of the air emissions license amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

1. Mattingly Products Company, Inc. (MPC) of Anson, Maine was issued Air Emission License A-123-71-K-R/A on March 24, 2006, permitting the operation of emission sources associated with their asphalt batch plant, concrete batch plant and stone crushing operations.
2. MPC has requested an amendment to their license in order to:
 - i. add a new portable concrete batch plant (Concrete Batch Plant #2) and storage silo (Silo #2-1) to be temporarily located in Fairfield.
 - ii. relocate an existing diesel-fired generator (Generator #1) from North Anson to Fairfield.
 - iii. add a new diesel-fired generator (Generator #4) to be located at the North Anson site to replace Generator #1.
 - iv. update the sizes of all existing diesel-fired generators, which were previously licensed incorrectly.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Concrete Plant

<u>Equipment</u>	<u>Production Rate</u>	<u>Pollution Control Equipment</u>
Concrete Batch Plant #2	100 yd ³ /hr	Baghouse
Silo #2-1	--	Baghouse

Diesel Units:

<u>Source ID</u>	<u>Max Capacity (MMBtu/hr)</u>	<u>Max Firing Rate (gal/hr)</u>	<u>Power Output (kW)</u>	<u>Fuel Type, % sulfur</u>
Generator #1	1.07	7.8	100	Diesel, 0.05%
Generator #2	3.74	27.3	350	Diesel, 0.05%
Generator #3	6.94	50.6	650	Diesel, 0.05%
Generator #4	1.60	11.7	150	Diesel, 0.05%

C. Application Classification

This amendment will not increase quantifiable long-term emissions of any pollutant. MPC is adding new equipment to the license; therefore the application has been processed as an amendment to their Chapter 115 Air Emission License.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas. BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Department's regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Concrete Batch Plant #2

MPC plans to establish a satellite concrete batching location in Fairfield. Concrete Batch Plant #2 will be located there, as well as previously licensed Generator #1.

To meet the requirements of BPT for control of particulate matter (PM) emissions from the cement silo, particulate emissions shall be vented through a baghouse maintained for 99% removal efficiency. Visible emissions from the cement silo baghouse is limited to no greater than 10% opacity on a 6-minute block average basis except for no more than one 6-minute block average in a 1-hour period. The facility shall take corrective action if visible emissions from the baghouses exceed 5% opacity.

All components of the concrete batch plant shall be maintained so as to prevent PM leaks. Visible emissions from concrete batching operations shall not exceed 20% opacity on a 6-minute block average basis except for no more than one 6-minute block average in a 1-hour period.

C. Generator #4

Generator #4 is a new generator that will replace Generator #1 at the North Anson site. The unit is rated at 1.60 MMBtu/hr and fires low sulfur diesel fuel with a sulfur content not to exceed 0.05% by weight.

A summary of the BACT analysis for Generator #4 (150 kW) is the following:

1. The total fuel use limit for all diesel generators (including Generator #4) shall remain at 20,000 gallons per year as required by Air Emission License A-123-71-K-R/A.
2. Chapter 106 regulates fuel sulfur content, however in this case the BACT analysis for SO₂ determines a more stringent limit of 0.05% is appropriate for diesel fuel and shall be used.
3. Chapter 103 regulates PM emission limits. The PM₁₀ limits are derived from the PM limits.
4. NO_x, CO, and VOC emission limits are based on AP-42 data dated 10/96.
5. Visible emissions from Generator #4 shall not exceed 20% opacity on a 6-minute block average basis, except for no more than two 6-minute block averages in a continuous 3-hour period.

D. Annual Emissions

MPC shall be restricted to the same annual emissions as are listed in Air Emission License A-123-71-K-R/A, based on a 12 month rolling total. Annual Emissions are based on the same fuel use limits listed in Air Emission License A-123-71-K-R/A of 130,000 gallons/year of diesel fuel, with a sulfur content of 0.05% by weight in the asphalt batch plant and the use of 20,000 gallons/year of diesel fuel, with a sulfur content of 0.05% by weight in the diesel-fired generators:

Total Licensed Annual Emission for the Facility
Tons/year
(used to calculate the annual license fee)

	PM	PM₁₀	SO₂	NO_x	CO	VOC
Asphalt Plant	1.14	1.14	0.46	3.97	13.24	0.27
Generators #1, #2, #3 and #4	0.16	0.16	0.07	6.04	1.30	0.48
Total TPY	1.30	1.30	0.53	10.01	14.54	0.75

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-123-71-L-A subject to the conditions found in Air Emission License A-123-71-K-R/A, and in the following conditions:

The following replaces Condition (20) of License A-123-71-K-R/A:

(20) Diesel Units

- A. Generators #1, #2, #3 and #4 shall be limited to a combined firing of 20,000 gallons/year of diesel fuel, with a maximum sulfur content of 0.05% by weight, on a 12-month rolling total. Compliance shall be demonstrated by fuel use records and receipts showing that the fuel used is on-road diesel. [MEDEP Chapter 115, BPT]
- B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator #1	PM	0.12	MEDEP, Chapter 103, Section 2(B)(1)(a)
Generator #2	PM	0.12	MEDEP, Chapter 103, Section 2(B)(1)(a)
Generator #3	PM	0.12	MEDEP, Chapter 103, Section 2(B)(1)(a)
Generator #4	PM	0.12	MEDEP, Chapter 103, Section 2(B)(1)(a)

C. Emissions shall not exceed the following [MEDEP Chapter 115, BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.13	0.13	0.06	4.71	1.02	0.38
Generator #2	0.45	0.45	0.20	16.46	3.55	1.31
Generator #3	0.84	0.84	0.36	22.19	5.90	0.63
Generator #4	0.20	0.20	0.09	7.06	1.52	0.56

D. Visible emissions from each of Generators #1, #2, #3 and #4 shall not exceed 20% opacity on a 6-minute block average basis, except for no more than two 6-minute block averages in a continuous 3-hour period.

The following is a new Condition:

(27) Concrete Batch Plant #2

- A. Particulate emissions from the cement silo shall be vented through a baghouse and all components of the batch plant shall be maintained so as to prevent PM leaks. [MEDEP Chapter 115, BPT]
- B. To document maintenance of the cement silo baghouse, the licensee shall keep a maintenance log recording the date and location of all bag failures as well as all routine maintenance. The maintenance log shall be kept on-site at the concrete batch plant location. [MEDEP Chapter 115, BPT]
- C. Opacity from the cement silo baghouse is limited to no greater than 10% on a 6-minute block average basis, except for no more than one 6-minute block average in a 1-hour period. MPC shall take corrective action if visible emissions from the baghouse exceed 5% opacity. [MEDEP Chapter 101]
- D. PM emissions from the concrete batching operation shall be controlled so as to prevent visible emissions in excess of 20% opacity on a 6-minute block average basis, except for no more than one 6-minute block average in a 1-hour period. [MEDEP Chapter 101]

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DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2006.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAVID P. LITTELL, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-123-71-K-R/A.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: April 28, 2006

Date of application acceptance: May 16, 2006

Date filed with the Board of Environmental Protection: _____

This Order prepared by Eric Kennedy, Bureau of Air Quality.